# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,	)	
Department of Justice	)	
Antitrust Division	)	
325 7th Street, N.W., Suite 500	)	
Washington, D.C. 20530,	)	
	)	
Plaintiff,	)	Civil Number:
	)	
v.	)	Judge:
	)	
ALCOA INC.,	)	
201 Isabella Street	)	
Pittsburgh, PA 15219,	)	
	)	
REYNOLDS METALS COMPANY	)	
6601 West Broad Street	)	
P.O. Box 27003	)	
Richmond, VA 23261,	)	
	)	
Defendants.	)	
	)	

#### **COMPLAINT**

The United States of America, acting under direction of the Attorney General of the United States, brings this civil antitrust action to prevent the proposed merger between Alcoa Inc. (Alcoa) and Reynolds Metals Company (Reynolds).

# I. NATURE OF THE ACTION

- 1. Alcoa is the largest aluminum company in the United States and the world. Alcoa proposes to acquire Reynolds, the second largest aluminum company in the United States, and third largest aluminum company in the world.
- 2. Alcoa and Reynolds are both fully integrated companies engaged in all stages of aluminum production, including mining raw aluminum ore (bauxite), refining bauxite into alumina

powder, smelting alumina into metal ingots, and ultimately fabricating the metal ingots into end products such as aluminum foil, beverage cans, building materials, and aircraft skin. The alumina refining industry is a highly concentrated one.

- 3. The proposed merger will substantially lessen competition in the refining and sale of both smelter grade alumina (SGA), which is used to produce aluminum ingots, and chemical grade alumina (CGA or hydrate), an ingredient used in numerous industrial and consumer products. In addition, Alcoa's acquisition of Reynolds substantially increases the likelihood that Alcoa can unilaterally control prices and also increases the likelihood that the remaining SGA and CGA producers will be able to coordinate to raise prices, harming consumers. As a result of the proposed merger, higher prices are likely for aluminum and other products containing alumina.
- 4. Competition between Alcoa and Reynolds has benefitted consumers through lower prices and higher output. The proposed merger threatens to lessen competition in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

I.

#### JURISDICTION AND VENUE

- 5. This action is filed by the United States under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to prevent and restrain the defendants from violating Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.
- 6. Both Alcoa and Reynolds produce and sell SGA and CGA. Alcoa and Reynolds are engaged in interstate commerce and in activities substantially affecting interstate commerce. The Court has subject matter jurisdiction over this action and jurisdiction over the parties pursuant to Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. §§ 1331 and 1337.

7. The defendants transact business and are found within the District of Columbia. Venue is proper in this District under 15 U.S.C. § 22 and 28 U.S.C. § 1391(c).

II.

#### **THE DEFENDANTS AND TRANSACTION**

- 8. Alcoa is a Pennsylvania corporation, with its principal offices located in Pittsburgh, Pennsylvania. Alcoa is the largest integrated aluminum company in the United States and the world with 1999 revenues of over \$16 billion. Alcoa owns alumina refineries in Kwinana, Pinjarra and Wagerup, Western Australia; Pocos de Caldas, Brazil; San Ciprian, Spain; St. Croix, Virgin Islands; and Pt. Comfort, Texas. Alcoa also manages the operations of three alumina refinery joint ventures in which it has an ownership interest: Paranam, Suriname (55 percent Alcoa ownership); Sao Luis, Brazil (54 percent Alcoa ownership); and Clarendon, Jamaica (50 percent Alcoa ownership).
- 9. Reynolds is a Virginia corporation with its principal offices in Richmond, Virginia. Reynolds is the second largest integrated aluminum company in the United States and the third largest in the world with 1999 revenues of over \$4.6 billion. Reynolds owns an alumina refinery in Corpus Christi, Texas; 56 percent and control of the management of a joint venture alumina refinery in Worsley, Western Australia; 50 percent of a joint venture alumina refinery in Stade, Germany; and manages and is entitled to 10 percent of the production of the Friguia, Guinea alumina refinery.
- 10. On August 18, 1999, Alcoa and Reynolds entered into an agreement whereby Alcoa will acquire Reynolds by exchanging each outstanding share of Reynolds common stock for 1.06 shares of Alcoa common stock. The transaction is valued at \$5 billion.

#### III.

# TRADE AND COMMERCE

#### A. Smelter Grade Alumina

#### 1. Relevant Product Market

- 11. The fabrication of aluminum products begins with the mining of bauxite ore.

  Bauxite ore is processed at refineries to extract alumina. SGA is alumina that is used by aluminum smelters to make aluminum metal. About two-thirds of total SGA production is internally consumed by smelters owned by SGA producers. Surplus SGA refined by vertically integrated firms is sold to third-party purchasers. Some of the third-party purchasers are themselves vertically integrated firms that have a deficit of internal SGA production; other purchasers of SGA are independent smelters with no alumina operations.
- 12. There are no products that are substitutes for SGA; SGA is the only material that can be used to make aluminum metal. If aluminum smelters were confronted with a small but significant SGA price increase, smelter owners would have to pay the higher prices or close their smelters.
- 13. The refining and sale of SGA is a relevant product market (*i.e.*, a "line of commerce") within the meaning of Section 7 of the Clayton Act.

# 2. The Relevant Geographic Market

14. Aluminum smelters purchase alumina from refineries located throughout the world. Alcoa, Reynolds, and other alumina refiners refine and sell SGA throughout the United States and the world.

15. The world constitutes a relevant geographic market for SGA within the meaning of Section 7 of the Clayton Act.

# 3. Anticompetitive Effects and Entry

- 16. In 2000, world SGA refinery capacity is expected to total 49 million metric tons (MT). (A metric ton is 2204.6 lbs.) Alcoa owns or controls approximately 14.5 million MT of SGA capacity or 29 percent of the market. Reynolds owns or controls approximately 4.4 million MT of SGA capacity or 9 percent of the market.
- 17. The world SGA market will become substantially more concentrated if Alcoa acquires Reynolds. Using a measure of concentration called the Herfindahl-Hirschman Index (HHI) (defined and explained in Appendix A), the proposed transaction will increase the HHI in the world SGA market by more than 530 points to a post-merger level of approximately 1800.
- 18. A small decrease in the supply of SGA will cause a significant increase in the price of SGA (*i.e.*, demand for SGA is highly inelastic). It is extremely costly and inefficient to shut down a smelting operation; smelters therefore require a stable and steady supply of SGA to maintain production. When the July 1999 explosion at Kaiser Aluminum Corporation's Gramercy, Louisiana, refinery removed 2 percent of world alumina capacity, SGA "spot" prices nearly tripled, and long-term SGA contract prices increased 20-30 percent.
- 19. By merging with Reynolds, Alcoa's market share will increase to nearly 40 percent of world SGA capacity. Because demand for SGA is so inelastic, this increase in market share will significantly enhance Alcoa's incentive and ability to exercise market power unilaterally by reducing its output in the SGA market. Alcoa will have sufficient market share to profit from the increase in price caused by a unilateral reduction in output.

- 20. The proposed transaction will also increase the likelihood of anticompetitive coordination among Alcoa and other remaining firms in the world SGA market. The SGA market has certain characteristics conducive to anticompetitive coordination, including product homogeneity; stable, predictable and inelastic demand and supply; and transparency of actions by suppliers and customers.
- 21. A significant increase in output of SGA in response to anticompetitive price increases in SGA is unlikely to be timely or sufficient to undermine such price increases. Firms are currently operating at or near capacity. Successful entry through the construction of a new "greenfield" alumina refinery or through the expansion of an existing "brownfield" refinery is slow, costly, and difficult. A minimum efficient scale greenfield refinery could cost \$1 billion and take four years or longer from planning to operation. Reynolds' expansion of its Worsley refinery is costing \$700 million and was scheduled to take 32 months. No company attempted entry or expansion in response to the Gramercy closure despite the significant increase in SGA prices after the closure.
- 22. In the world market for SGA, the proposed merger threatens substantial and serious harm to consumers. By substantially increasing Alcoa's market share of SGA capacity in the relevant market, the proposed merger will provide Alcoa with substantially enhanced control over the price of SGA, while also increasing the likelihood of anticompetitive coordination in the market.

#### B. <u>Chemical Grade Alumina</u>

#### 1. Relevant Product Market

- 23. Alumina refineries produce two different products -- SGA and CGA. Until the last stage of the refining process, SGA and CGA undergo the identical refining process. At that stage, SGA is calcined in kilns. CGA is removed prior to calcining and sold as "wetcake" or dried and sold as dry hydrate.
- 24. CGA is an important ingredient in numerous products such as zeolites (used in detergents), solid surface counter tops, catalysts for oil refineries and auto exhaust systems, white pigments in the paper industry, flame retardants, and water treatment chemicals.
- 25. Other products are not reasonable substitutes for CGA. If the price of CGA were to increase by a small but significant amount, a significant number of current purchasers are unlikely to switch to alternative products in significant numbers. In order to substitute another less suitable product, the product in which CGA was used would have to be reformulated, a lengthy and expensive process.
- 26. The refining and sale of CGA is a relevant product market (*i.e.*, a "line of commerce") within the meaning of Section 7 of the Clayton Act.

## 2. Relevant Geographic Market

- 27. Prices of CGA vary in different regions throughout the world. CGA is sold in North America, and North American producers of CGA compete for sales to customers located throughout North America. Imports of CGA into North America account for less than 5 percent of the CGA sold in North America.
- 28. Importation of CGA into North America is unlikely to increase significantly in response to an anticompetitive increase in the price of CGA in North America. The additional handling of the product that occurs in importing CGA increases the likelihood that it will become

contaminated. Also, the costs of freight, handling, and storage are too high to economically import the product in the quantities required by customers in North America.

29. North America constitutes a relevant geographic market for CGA within the meaning of Section 7 of the Clayton Act.

### 3. Anticompetitive Effects and Entry

- 30. There are only five producers of CGA in North America, with the four largest producers accounting for more than 90 percent of production. Alcoa is the largest North American producer of CGA, with approximately 39 percent of 1998 production. Reynolds is the third largest North American producer of CGA, with approximately 20 percent of 1998 production.
- 31. The North American CGA market will become substantially more concentrated if Alcoa acquires Reynolds. Using the Herfindahl-Hirschman Index, the proposed transaction will increase the HHI in the North American CGA market by more than 1500 points to a post-merger level of 4222.
- 32. The Alcoa-Reynolds merger will raise Alcoa's market share to nearly 59 percent of North American CGA production, enhancing Alcoa's ability and incentive to exercise market power unilaterally by reducing its output in the market. Alcoa will have sufficient market share to profit from the increase in price caused by a unilateral reduction in output.
- 33. The proposed transaction will also increase the likelihood of anticompetitive coordination among the remaining firms in the North American CGA market. Post merger the top three CGA producers will account for 90 percent of the market. The CGA market has certain

characteristics conducive to coordinated interaction, including product homogeneity and high concentration.

- 34. A significant increase in output of CGA in response to anticompetitive price increases in CGA is unlikely to be timely or sufficient to counteract such price increases. Firms are currently operating at or near capacity. Successful entry through the construction of a new "greenfield" alumina refinery or through the expansion of an existing "brownfield" refinery is slow, costly, and difficult. A minimum efficient scale greenfield refinery will cost \$1 billion and take four years or longer from planning to operation. Reynolds' expansion of its Worsley refinery is costing \$700 million and was scheduled to take 32 months.
- 35. In the North American market for CGA, the proposed merger threatens substantial and serious harm to consumers. By substantially increasing Alcoa's market share of CGA capacity in the relevant market, the proposed merger will provide Alcoa with substantially enhanced control over the price of CGA, while also increasing the likelihood of anticompetitive coordination in the market.

#### IV.

#### **VIOLATIONS ALLEGED**

- 36. The effect of Alcoa's proposed acquisition of Reynolds will be to lessen competition substantially and tend to create a monopoly in interstate trade and commerce in violation of Section 7 of the Clayton Act.
- 37. Unless restrained, the transaction will likely have the following effects, among others:
  - a. actual and potential competition between Alcoa and Reynolds will be eliminated;

- b. competition generally in the production and sale of SGA and CGA also will be lessened substantially;
- c. prices for SGA and CGA are likely to increase; and
- d. the amount of SGA and CGA is likely to decrease.

#### IV.

#### **REQUESTED RELIEF**

## WHEREFORE, Plaintiff requests:

- 1. That the proposed acquisition by Alcoa of Reynolds be adjudged to violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18;
- 2. That the defendants be permanently enjoined from and restrained from carrying out the Agreement dated August 18, 1999, or from entering into or carrying out any agreement, understanding, or plan, the effect of which would be to combine the businesses or assets of Alcoa and Reynolds;
  - 3. That plaintiff be awarded its costs of this action; and

4. That plaintiff have such other rela	ief as the Court may deem just and proper.
Dated this <u>3rd</u> day of <u>May</u> 2000.	
Respectfully submitted,	
FOR PLAINTIFF UNITED STATES	
"/s/"	"/s/"
Joel I. Klein Assistant Attorney General	Roger W. Fones Chief, Transportation, Energy & Agriculture Section
"/s/"	"/s/"
John M. Nannes Deputy Assistant Attorney General	Donna N. Kooperstein Assistant Chief, Transportation, Energy & Agriculture Section
"/s/"	"/s/"
Constance K. Robinson Director of Operations and Merger Enforcement	Allee A. Ramadhan D.C. Bar # 162131 Bruce Pearson Connecticut Bar # 372598 Janet R. Urban Mark S. Hegedus D.C. Bar # 435525 Andrew K. Rosa Hawaii Bar # 6366 Michelle J. Livingston D.C. Bar # 461268 Attorneys U.S. Department of Justice Antitrust Division 325 7th Street, N.W. Suite 500 Washington, D.C. 20530 (202) 307-6470

# APPENDIX A DEFINITION OF "HHI"

The term "HHI" means the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration. The HHI is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30, 30, 20, and 20 percent, the HHI is  $2,600 (30^2 + 30^2 + 20^2 + 20^2 = 2,600)$ . The HHI takes into account the relative size and distribution of the firms in a market. It approaches zero when a market is occupied by a large number of firms of relatively equal size and reaches its maximum of 10,000 when a market is controlled by a single firm. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

Markets in which the HHI is between 1000 and 1800 are considered to be moderately concentrated, and markets in which the HHI is in excess of 1800 points are considered to be highly concentrated. Transactions that increase the HHI by more than 100 points in highly concentrated markets presumptively raise significant antitrust concerns under the Department of Justice and Federal Trade Commission 1992 Horizontal Merger Guidelines.

## **CERTIFICATE OF SERVICE**

I hereby certify that I have caused a copy of the foregoing Complaint to be served on counsel for defendants in this matter in the manner set forth below:

By first class mail, postage prepaid, and by hand:

Mark Leddy Cleary, Gottlieb, Steen & Hamilton 2000 Pennsylvania Avenue, N.W. Washington, DC 20006-1801

Michael H. Byowitz Wachtell, Lipton, Rosen & Katz 51 West 52nd Street New York, NY 10019-6150

"/s/"

Andrew K. Rosa Hawaii Bar # 6366

Trial Attorney Antitrust Division U.S. Department of Justice 325 Seventh Street, N.W. Suite 500 Washington, D. C. 20530

(202) 307-0886 (202) 616-2441(Fax)